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GENESEE FARMER.

SATURDAY, FEBRUARY 18, 1837.

A Curious Animal.

To the student of nature, and no person should feel a greater interest in belonging to this class than the farmer, one of the most instructive as well as the most singular series of things submitted to his observation, is the insensible shades and gradations that mark the whole series of animated nature from the lowest to the highest, from the half vegetating polypi, to the mysteriously constructed and intellectual lord of the creation, man. The manner in which unorganized matter slides into that which is organized, scarcely enabling us to distinguish some specimens of chrystalization from the lowest grades of vegetable life;—the shadowy boundary that divides the highest orders of vegetation, those that make the nearest approaches to irritability, and the lowest classes of vitalized existence;—the mingling of characteristics at the boundary that separates fishes from birds, and fishes from quadrupeds;—the blending of the qualities deemed most characteristic of both birds and beasts in such a way as to puzzle the most experienced naturalist, are all calculated to interest and instruct, while they dissuade from dogmatism, and invite to further investigation.

By common consent the Bat seems to have been considered the connecting link between birds and beasts, and after a good deal of discussion among the older naturalists, as to which class it should be placed, has been assigned to the latter. So far as concerns the connexion between land birds and land animals, the bat is undoubtedly entitled to the consideration that has been given it; but still it seemed as if to complete the chain, some link was wanting to unite those birds that belong to the water, with the corresponding animals in the next series above. This animal has been found in the *Ornithorhynchus paradoxus*, or water mole, a native of New Holland.

Among the strange creatures that exist in that land of convicts and Kangaroos, there is none that has proved a more serious stumbling block to the naturalist than the animal with the above unpronounceable name. Mr. Bennett, an English gentleman resident in that country, first brought it to the notice of the public, by the specimens which he transmitted to the London museums. The *platypus*, or water mole, is as essentially aquatic in its habits, as the beaver or muskrat, living in the still deep parts of the Australian river, and like the latter animal in this country burrowing deep in the banks. It is from sixteen to eighteen inches in length; colored like the otter which it resembles in shape; and like most aquatic mammalia is covered with a double coat of fur, one coarse, and one of the thickest finest texture like that of the beaver. The tail is short, and covered with fur, unlike that of the beaver. The feet are strong and broad, furnished with five long toes, ending in blunt claws, and *webbed* as perfectly as the foot of a goose or duck. This broad web enables the animal to swim or dive when it pleases, with great swiftness and facility, and renders it extremely difficult to capture.

But the most singular feature in the *platypus*, is its head, and it is this, in connexion with its webbed feet, that renders it an object of so much curiosity to the naturalist. Instead of the head terminating in a snout, as in other mammalia, it immediately below the eyes changes to a beak resembling in almost every respect that of the duck, broad, dark colored, horney in texture, and internally channeled and grooved, like the bill of that water fowl. This bill is perfectly smooth, and like that of many other birds is furnished at the base with leathery wrinkles or appendages. In short it has the feet and bill of a bird and the form and the fur of an animal.

The habits of this animal are of course as yet much involved in obscurity; and it is not yet even decided whether it is *ovaporous* or *vivaporous*. The investigations of Mr. Bennett appear to have made one thing certain, and that is, if the young are produced alive, they are at least excluded from eggs, hatched, as in many of the snakes, while yet within the body of the mother, a process not altogether unlike that by which the Opossum of this country is produced. The newly born offspring are nourished in the same manner as in other examples among the *mammalia*. Two large glands secrete a milky fluid in great abundance, which exudes through a number of small tubes in an *aureola* or bare circular space on each side of the abdomen. "*Milliken* (milk) come all same as from cow," said a native to Mr. Bennett; who ascertained that milk, and afterwards insects mixed with mud, formed the diet of the young *platypus*.

Boring for Water.

Good pure water for drink and for cooking is indispensible for the purposes of comfort and health; and a plentiful supply for the use of the farm is not less essential to the prosperity of the farmer. To obtain the requisite quantity of water, springs and rivers are first laid under contribution; but as springs do not always exist, and rivers are not always convenient, recourse is had to wells as a substitute for both. In most countries, or in most sections of this country, water is found by penetrating the earth to a modorate depth, and wells of durable and pure clear water are easily obtained. There are some sections of the country however where this is not the case; where water cannot be procured by digging except at a great depth and consequent increased expense; or where the qualities of the soil are such as to render wells impossible, or the water, when with great difficulty obtained, worthless for culinary purposes.

To overcome these obstacles to obtaining a necessary supply of pure water, a system has been adopted of penetrating the earth by boring through the successive interposing strata, no matter of what they may consist, until water of the desired quality and quantity is found. To obtain this it is sometimes necessary to penetrate the earth to a great depth, the boring in this country having in several instances equalled seven or eight hundred feet; but in general a sufficient supply is found before the boring reaches one third of this depth. When a spring is struck in boring, it not unfrequently rises to the surface of the earth, forming a permament stream of pure water and equal temperature. Sometimes the source of the spring struck, is not sufficiently elevated to force it up to the surface, in this case a pump can be inserted in the opening and the water in any desired quantity, obtained in the usual manner. Wells thus made by boring into the earth, and conducting the water from great depths to the surface, are termed Artesian wells, from the department of Artois in France, where such wells have been for a long time in use, water being with difficulty procured in any other way in that region.

The principle which operates in the formation of Artesian wells has been thus described by M. Arago in a number of the French philosophical publication, the 'Annuaire.' "If the rain which falls, or the snow which melts, on the opposite ranges of mountains, filtrates through porous strata, or finds its way through apertures or fissures of stone, situated between strata either quite or almost impervious to water, and running below the surface of the valley, it makes for itself a channel, the form of which we will suppose to be that of an elongated curve. If any part of the valley be bored until this body of water be reached by the boring rod, the water will spring up under the impulsion of that law of hydraulics which forces water to ascend to its own level, and a natural well or fountain will by this means be created. This result will not be affected by the width or extent of the valley, which may be one mile, or twenty. The force with which the water ascends will of course be regulated by the position chosen for the operation of boring. It will be greatest at that point which is situated at the lowest level, and will diminish as the level of the source is approached from which the supply is derived. The small springs which are met with in sinking a common well, are regulated by the same laws as Artesian fountains, but their sources are not sufficiently elevated or copious to enable them to reach the surface."

In further illustration of this matter we may be permitted to refer to an incident probably within the recollection of most readers of the Farmer; we allude to the recent great *land slide* at Troy in this State which caused such loss of life and destruction of property. The heavy rains which had fallen previous to the slide, had been received into a strata of sand or porous earth underlaying the clay upon the side hill from which the mass descended to the city. Down this porous strata the water percolated until its passage was prevented by some obstacle, either permanent, or occasioned by the nature of the season. Thus stopped or dammed up in its descent, and unable to force its way through the superincumbent mass of clay, the water continued to rise towards its sources until the *head* so acquired, gave it such power as to lift the overlaying clay from its position, and thus clay, sand, and the large volume of water, were at once precipitated upon the city. Now had this stratum of clay that prevented the escape of the water been perforated by boring near the point where the obstacle to the descent of that fluid existed, it is evident the water would have risen to the surface with great force, a true Artesian fountain been constructed, and the catastrophe averted, by a speedy reduction of the pressure of the water.

The bore of these wells varies in diameter from four inches to six or eight. Where the soil is of common earth or sand the operation of sinking proceeds with great rapidity, but where as in most cases rocks are to penetrate, the boring will of course be more slow and difficult. Much of this difficulty will however be depending on the nature of the strata of stone encountered. In slate or sand rock the chisel will cut it away much faster than where the primitive strata are to be penetrated. The implements and machinery for boring are of the simplest kind, the principal expense consisting in the iron rods used for connecting the borer with the machinery at the surface of the earth; these rods are connected by screws, the separate pieces being added as required.

If in boring, a vein of water is struck not of good quality, it is shut out from the boring by passing a pipe so as to exclude the spring. It also frequently happens, especially in the limestone strata, that cavities in the rocks, caverns or seams, are struck, through which the water when found, whatever might be its quantity, would escape; in all such cases pipes are indispensable. In some cases streams of running water are struck, through which the ascending spring must of course be passed. In boring for water at the Fontainbleau gate near Paris, the auger when at a great depth dropped at once twenty-four feet into a subterranean river; the current was so rapid as to cause a sensible oscillation of the rod at the surface while the workmen were withdrawing it.

The fountain at Nimes in France is one of the most celebrated of these wells. Its discharge is more variable than some others, in very dry seasons falling as low as 250 gallons per minute, and after heavy rains sometimes reaching 2000 gallons in the same time. The Artesian fountain of Tours in the same country is also well known. Here the depth of the boring is 340 feet, the discharge per minute is 230 gallons, and the water rises six or eight feet above the opening of the fountain at the surface. The deepest of these wells of which we have noticed any

statement, is the one near Dieppe in France, where water is procured from the depth of 1020 feet. In some parts of France where water power is scarce, the water of these artesian springs is employed for propelling machinery. At Frontes, by ten borings, water sufficient to drive a large grist mill, and nail factory, is procured, At Tours the machinery of an extensive silk manufactory is driven by water obtained from a single boring at the depth of 450 feet. The quantity of water delivered per minute, is 225 gallons. As the water obtained from such depths is of equal but high temperature at all times, it has been employed for warming green houses, growing cresses artificially, and for various other purposes, of domestic comfort and economony.

It has been but a few years since the first well of the kind was opened in the United States. This was, we think, in New-Jersey. Mr. Disbrow has the honor of bringing them into notice, and from the success which has attended his numerous fountains, such springs are now frequently called Disbrow's wells. Among many other he has superintended four borings in the city of New-York, being employed by the corporation. The general depth has been about 400 feet, and supplies of the best and purest water has been obtained. From one of these corporation wells, from 12 to 20 thousand gallons are daily distributed. The well known and extensive hotel of Mr. Holt is also furnished with an abundant supply of the best water from a boring by Mr. Disbrow.

There are few regions of the country where the external indications in favor of Artesian wells are stronger, than in what is called Western New-York; and there are few sections of the United States where such wells are more needed for the convenience of farms, than in some parts of the Genesee country. Sweeping around the south-east and south of lake Ontario, Western New-York, presents what may, when viewed as a whole, be considered as an extensive plain, rising by an almost imperceptible gradation from the level of the lake, to the height of land that separates the waters of the Susquehannah and Allegany from those of the Ontario. From the lake to this elevated land varies in different places from 40 to 70 miles. As a whole, this section of country, comprising the best wheat region on the globe, cannot be considered as well watered; and notwithstanding the numerous lakes and rivers scattered over it, there are many places where the want of pure water, and indeed of any, is felt as a serious inconvenience. Water which falls on such soils as compose the greater part of the Genesee region, penetrates the earth but little, and must the greater part flow off. Springs are but few in number, as the nature of the rock strata on which the country is based is unfavorable to those openings necessary to permit the rise of the waters imprisoned below these strata. The copious springs, however, that rise wherever such fissures appear, show that but let the interposing strata be perforated, and water would flow in abundance. The depth to be bored could of course be determined only by actual experiment; but admitting it to be 400 feet, the expense would not be beyond the ability of a prosperous farmer, certrinly not that of three or four, who might in most cases be accommodated. We know an oppulent farmer who has spent more money in digging common wells without finding water, and filling them up again, than in all probability would have cost him to have penetrated 800 feet; and yet we much question whether he ever heard of an Artesian well, though the situation of his farm is such that a boring could scarcely fail of being successful.

The few borings that have been attempted in Western New-York have, we believe, been uniformly successful, water being found without difficulty, and in some instances permanent fountains, from which considerable streams flow, have been created. On this subject more information is wanted; and we hope that those who have conducted operations of this kind, will lay the details in full before the readers of the Farmer.

☞ **We have another letter from Mr. *Fancher*; but as it is necessary to accompany its publication with a refutation of its statements, we cannot publish it till next week.**

Practical Effects of Agricultural Societies.

The February No. of the Virginia *Farmer's Register* contains an extended communication from Dr. Beekman of Kinderhook, in reply to the inquiry of the Editor as to the provisions and effects of the Law of 1819, to encourage the Agriculture of this State. After giving the law, and stating the imperfect manner in which it was carried into effect, the Doctor proceeds as follows:

"I will now give a concise history of its effects upon their agriculture. At the organization of the society [under the law], I think I have before observed, that it was in a low state. The quantity produced was small, its quality inferior—our cattle and horses illy attended to—sheep-husbandry scarcely known, and worse practised—our farms gave us but a scanty support, and houses little comfort. As illustrative of one fact, I distinctly remember one of our most enterprising and intelligent farmers observing to me, that we could not raise good clean wheat. There would always be a little rye, cockle, smut or chess in it—it was unavoidable. But when farmers were brought together at our fairs, by competition, they saw that better articles could be produced, and that to succeed themselves, more care must be used in the selection of their seed, more judgment used in its tillage, to insure a heavy crop, and skill in preparing it for market—that the way to acquire this intelligence was to mix with the best practical farmers in the country, acquire a knowledge of their superior management, and then profit by it. The same gentleman who made to me the observation alluded to, was so far benefitted by the diffusion of information, that he became one of the most successful wheat growers, both in quality and quantity, in this country; and he occasionally in subsequent life, alluded to his former mistaken notions of its cultivation. I have made the allusion to this particular branch of agriculture simply to show its effects in this case upon one of our productions, but when those productions extend to all those raised by the farmer, for it would have a like effect upon each, we must come to the conclusion, that the spirit of rivalry and competition created the desire to become acquainted with the best method of raising all our agricultural products—of having it said that we had the best cultivated farm, the best arranged barns and out houses, the best agricultural implements; that we raise more and better wheat, corn, oats, rye, or barley, upon less land than others; that we had the best stud of horses, or drove the best pair; that our hogs were the fattest, and cost the least; our cattle the finest, and most profitable; and our sheep bear competition with any other; and the independence of feeling and practical comfort growing out of any or all of these advantages.

"If these were any of the effects derived from agricultural societies, we must admit they were highly useful. The spirit of improvement is still somewhat rife among us. What gave it first the impulse, unless it was the excitement created by competition, I know not. For more than ten years, our county society, under the law of 1819, has ceased to exist; but many of its fruits have not yet been gathered. We see it in the improved and improving condition of our farmers; all around them denotes comfort and increasing affluence—the envy and jealousy with which they looked upon professional men has disappeared, for they are engrossing a large portion of the wealth of the community. Fifteen years ago it was a rare sight to see a farmer riding in his carriage; now it is neither novel, nor is the number few that do and can afford to do it. We see too, many of them selling their farms, and retiring upon the fortunes created by their industry and care. It may be asked, can their successors receive the interests upon their investments, buying farms at $100, and often more, per acre? I answer yes. The solution is as easy as it is practical. Take, for instance, an acre of land producing wheat; it will not take extraordinary farming, in ordinary seasons, to produce twenty bushels to the acre; this, at present prices, would be over forty dollars worth of produce from it. Deduct one-third of the nett proceeds, for all the expenses of cultivation, and it will leave $26 66½ profit, giving nearly the interest, at 1 per cent. of $400 to the acre. Take oats, producing an average, neither large nor uncommon with us, of 40 bushels per acre—(we sometimes have 60 or 70)—this at present prices would be $20 per acre. Deduct again, one-third for expenses, would leave, $13 33⅓, or the interest of nearly $200 per acre. Take corn, and allow 40 bushels to the acre—this will be equal to $40, and give the same result as wheat. Rye will give about the same, or rather less profit than oats, or the interest upon $200 per acre. Barley will give as much as oats—potatoes and turneps at least double that of wheat or corn. Meadow lands at 2 tons of hay to the acre, and worth $12 per ton, would leave a nett profit of $16, which would pay the interest upon nearly $250. Pasturage would take in the remaining portion of the farm, except the woodland. This would leave a profit not as large as either of the others, but still enough to make the investment a good one. You will observe that in all cases, I make a deduction of one-third of the nett proceeds for the expenses of cultivation. A long experience has taught me that when a farm is worked for a part of its produce, or by men hired for that purpose, this portion will pay all necessary expenses. It is as near to a rule as any that I can adopt; and which ever way I manage, I have always found the allowance ample. Although we feel that farming is much more profitable now than formerly, and that the increased product gives more value to our real estate, yet we frankly acknowledge that we are only tyros in our profession, and confess our ignorance and inefficiency in many things. From what has been done by a little effort, we have only a foretaste of what may be done, and we are desirous for further advancement, as there can be no doubt that the products of our soil may, with more effort, in time be doubled. I will not say that our former County Agricultural Society has produced these results, but it has contributed to them, I have no doubt. Still it did not meet the expectations of its friends; for when the state bounty was withdrawn, it languished and died. Had it been all that was desired, it would have sustained itself, overcome the opposition of its enemies, and diffused an extensive and prevailing opinion, that it could not be dispensed with.

"You will notice that under the law of this state, of 1819, a board of agriculture was formed, whose business it was "to collect essays and facts, and to publish them annualy in a volume for distribution." The board attended to the performance of this duty, and issued in all, I think three or four volumes of about 50 pages each. I had the good fortune to obtain three of them, and to say that I was gratified by their perusal would be only giving them a kind of negative praise—I have read them again and again with both renewed pleasure and instruction. Several of the articles emanating from practical men, and evidently unused to writing, still contained many clear ideas that bear strongly upon the subject on which they treat, and are extremely valuable to the farmer, because while they excite a spirit of emulation, they show him how they may improve in following out many of the details of a laborious profession. There are others again drawn up by more scientific and practised pens, that would do credit to the first men of the age. It was the reading of these volumes that first gave me a taste for farming; and if the state had issued and distributed 15,000, instead of 1500 copies of each volume, it would have added millions to the wealth of her people."

Treatment of Milch Cows.

There is, perhaps, no part of the husbandry of our country so much neglected, as that which relates to the providing of provender for the mich cows on our farms. On many estates, even those of magnitude, the chief part of the food, if not the entire, which they get, are the blades, the tops and the husks of the corn, with an occasional gratuity of nubbins by way of a holiday feast. The consequence is, that if the winter be severe and protracted, there is nine chances out of ten, that every cow long before spring arrives, is either dry, or so near it, that the milk she will give is not worth the trouble and cost of stripping, so that many farmers with half a dozen or more cows have neither milk nor butter sufficient for the domestic uses of their tables, during the latter part of each winter, and by the time that the cold and bleak winds of March arrive, many of the cattle are on the *lift*. How is it possible it can be otherwise? There is little or no succulent in the

food we have described in its dry state, and consequently cows fed upon it, must, for the want of matter convertible into milk, cease to yield it. In every other country save our own, it forms a part of the business of every farmer or planter, to provide full supplies of nutritious food for his stock of every kind, and for those which comprise the dairy cows, especial pains and care are taken to provide a sufficient quantity of such roots as are heartening and succulent, so that by thus providing a substitute for the grasses of the pasture, or the soiling stalls or yards, his dairy, even through the dreary and inclement period of the winter, may continue to contribute largely to the comfort of his family, and to the increase of his fortune. No good farmer, then, will keep more cows than he can well keep, and in so keeping them he finds his trouble rewarded, and has besides the satisfaction of knowing, that in thus acting he has fulfilled an obligation imposed on him by every humane consideration, and discharged a duty required by Him, who, in placing the beasts of the field in subjection to man, enjoined that he should extend towards them his kindest protection and care. We frequently hear gentlemen complaining of the difficulty of procuring such cows as will make profitable returns, and of the impossibility of keeping them to their milk during the winter. The reason is obvious. No cow, and we care not what her breed may be, whether she be of improved Durham Short horn, the Devon, the Alderney, the common cow of the country, or any other—we say no cow can be kept in the pail, unless you give her something which will both nourish her system and replenish her udder. To make a cow yield a liberal supply of milk through the winter, she should have in addition to full supplies of food, wholesome hay or fodder, at least half a bushel of roots of some kind, or an equivalent of cabbages or kale per day. And if the hay should be fed long, each cow should have, at least two days in the week, messes of chopped rye and cut straw, to be either steamed or mixed up with boiling water, and permitted to remain until it be fermented before feeding. The ambition of procuring fine breeds of animals of all kinds, is one worthy of every praise; but that of taking good care of what we have, is equally if not more laudable. Besides these considerations, the interest of every farmer is always promoted by feeding his cows well. If fed in the niggard manner we have described, their keeping, such as it is, is a dead loss to their owners; they make no manure worth speaking about, and the animals themselves are comparatively valueless; and if kept generously through the winter, and sheltered from the weather, each cow will give her two gallons of milk per day, and make from four to seven pounds of butter per week, which latter should be set down as the profit, as the milk and cream consumed by the family will more than compensate for the feed. In addition to this, animals thus fed make three times the quantity of manure, and are always, in condition to command good prices. We have engaged in no speculative theories in what we have said, but have addressed ourselves to the common sense of the agricultural community in the hope that they will see the propriety of adopting some plan by which our object can be obtained. —*Western Adv.*

Good Potatoes the whole year.

In the Bangor Mechanic and Farmer of the 8th of Dec. there was a short but useful communication, headed 'Early Potatoes,' over the sig. M. S. in which the writer states that he dined with W. R. Lowney of Sebec, about the first of September, who treated him with fine ripe potatoes among other good things and how he managed to have them thus early by causing them to sprout in a bed of unfermented or green horse manure, a foot and a half thick two or three weeks before planting, handling them carefully so as not to break off the sprouts, &c. He preferred good sized early potatoes for an early crop. This is useful information. I would add a few thoughts by way of supplement. In the first place, the earliest variety should be selected, say the early blue, Perkins' early; or any other variety famous for quality and early maturity. Let a sufficiency of these, of the size and appearence of those you would wish to raise, be placed the fore part of March, in any warm situation, perhaps your cellar arch would cause them to sprout early enough; or adopt Mr. Lowney's practice of preparing them. Then, as a means of ripening them early, plant them as soon as the ground is in order; perhaps in the latter part of April, or the first of May, and you may expect a ripe crop on warm land, the last of July, or at farthest, by the 20th of August, according to the season. But it should be remembered that all early varieties, although excellent in their season, and perhaps through the year are comparatively unproductive. Of course we plant early potatoes only, for early use. There are many excellent varieties, producing good crops fit for table use, on or before the first of October, if planted in the month of May. The longer they remain in the ground uninjured by the frost the better. But to prevent hazard, dig the fore part of October; never drying them in the sun but immediately securing them from both sun and air, till the spring. They may be placed in tight barrels or sizeable boxes, and covered with sods, until a load was dug, and then carried to the cellar to be opened as wanted for use or sale. Good varieties, such as the Irish Bucksters, or the Chenangoes, managed in this way if not a subsitute, are certainly next to the staff of life, and are of double value.

For late keeping, some varieties are to be preferred before others. Almost any one, however, may be fairly preserved till early potatoes ripen, heading them up in air tight barrels before they begin to sprout, and this will prevent their sprouting.

A Farmer.

[*From the Maine Farmer.*]

Report of the Incidental Committee.

The Incidental committee appointed by the Kennebeck Co. Agricultural Society, having attended to the duty assigned them, submit the following report:

We have examined with a lively interest the machine for spinning and twisting silk, presented by Mr. Adam Brooks of Scituate Mass.—Although your committee have no practical knowledge of the art of reeling or spinning silk, yet as Mr Brooks, having provided himself with cocoons was able to give us a practical illustration of the operation of his Machine, we were convinced of the justness of his claims to excellency, by witnessing the ease and dispatch with which it performed the buisness for which it was designed.

Taking into consideration the already great, still increasing, and wide spread interest that is manifested in the silk buisness—the importance of that business—the undoubtedly good policy of encouraging it, and the extensive usefuleess of an efficient laborsaving machine as an auxiliary thereto, we cannot but feel, so far as the funds at our disposal will allow us, to be very liberally disposed towards Mr. Brooks, and cordially recommend that there be given him a gratuity of ten dollars.

MR. BROOKS' STATEMENT.

To the Incidental Committee of Kennebec County Agricultural Society.

Agreeably to your request I make the following statement respecting my domestic Silk Spinner and Twister presented in operation for your inspection, with some remarks on the first process of manufacturing silk from the cocoons.

With one of my improved Silk Spinners and Twisters, such as the one presented, having three spindles, a boy and a girl 12 or 14 years old can spin from 160 to 175 skeins of sewing silk in 10 hours from the cocoons, and finish them ready for cleansing and coloring.—Or they may prepare nearly as much twist in the same time. They can spin more in length than one seven knot skein, each knot containning ten yards in lenght to each spindle, per hour.

One person can manage the cocoon and thread while running or spinning the sewing silk for silk spindles, and running at the same time and moved by water, steam, or horse power, and if the cocoons are of the best quality, even more than this, if the threads are wanted fine for warp or filling. I think that it is evident from the nature of the case that the silk spun immediately from the cocoons into a finished thread whilst the gum or glue upon them is thoroughly soaked, as it is when it is running from the cocoons, will be better united in its fibre than it can be by being reelled in the common way, as has heretofore been done, before it is throwsted or doubled and twisted.

By reeling the cocoons into what is called raw silk we derange nature's perfect work; for the silk worm spins the thread perfectly even and smooth, and winds it up in a perfect ball as every good cocoon should be. This may de unwound without waste or tangling. The very great speed that may be applied to the ring spindles and travelers which I now make use of, and which seldom get out of order, even with the greatest velocity, turns the spinning from the cocoons greatly in favour of its being done at one operation, as it is not only cheapest but best and easiest. I now make silk spinning frames to contain any number of spindles to go by any power, and so constructed that the person tending the cocoons can stop any two threads when necessary while the others are going or can set them in motion again in an instant without leaving the pan in which the cocoons are placed. One very essential property of the ring spindle is this— they may be so adjusted as to twist the finest thread that is wanted for weaving or the coarsest sewing silk.

With respect. Adam Brooks.

[*From the American Gardener's Magazine.*]

Culture of the Pie Plant, or Rhubarb.

The pie Rhubarb is one of the best known substitutes for green gooseberry *tarts*, in the early part of the spring, and by many persons is greatly preferred in wholesomeness and flavor. This excellent vegetable has been cultivated in the vicinity of large cities, in most countries, where it has always found a steady and ready demand, as a market vegetable, and in private gardens it is always the first consideration.

Culture and Management.—The rhubarb is of easy culture, and very hardy, which renders it peculiarly adapted to this climate. It may be propagated either by seed or cuttings. The seed may be sown early in the spring, on a west border in drills, eighteen inches apart, and managed in the usual way of culture: the plants will be of a sufficient size to remove into a stationary bed, in the month of October, which is the best time for planting rhubarb. The method I have generally followed, and found to answer best, in making new plantations, is, by dividing the old roots or crowns, in such a manner that each set has one or more eyes. These *sets* I plant in nursery rows, two feet apart, and one foot from each other in the rows, in the spring, and remove them into their stationary bed in the fall.

Preparing and Planting.—The ground intended should be well prepared by manuring and trenching, as the rhubarb requires deep rich soil; this done, the bed may be divided into rows four feet apart each way, and at the angles the soil may be taken out to the depth of eighteen inches, into which may be planted one large root entire, which is to be covered with at least half of a wheelbarrow of well rotted manure, when the surface may be levelled. The after management of rhubarb requires good culture, as manuring, keeping clean, &c. If the plants are slightly protected, in the fall, with a quantity of manure, they will be benefitted, and will come forward earlier in the spring; the manure will also strengthen their roots.

The routine planting of the rhubarb should be every three years, as young plants always produce the most tender stalks or canes. The method I have adopted, is, to take up one third of my bed every year, by which I always keep up a good succession of young plants. Yours, Edward Sayers.

Newark, N. J. 1836.

Egyptian Wheat.—We learn by a letter from Mr. John Calkin of Elizabethtown, Essex county, N. Y., that he has a new variety of Wheat, which he believes to be true Egyptian. It was originally taken from a wild goose, has a number of small heads growing on each side of the pripciple head and making a head an inch and a half in diameter, and contaning in some instances 150 kernels of grain. It is more productive than common wheat, and is not liable to smut or weyvil. It is a spring grain, and requires early sowing. Mr. C. being desirous to centribute his mite towards the improvements of the present age, requests us to say to such farmers as wish to procure seed that he will furnish them on making their applications to him, post paid. We are inclined to the opinion that it is a valuable variety, and worthy the attention of wheat growers.—*Silk Cult.*

COMMUNICATIONS.

Shepherdia or Buffalo Berry—Winship's Nursery, Brighton, Mass.

FRIEND—You know we were old confederates in robbing the morn of certain hours which dairy maids and other early risers say belong to her. With all the prejudices of early education, strengthened by long habits of sloth in the morning, I had become a confirmed sceptic in the hearing of any such statement as that there is such an hour as 6 A. M., and such a daily event as sunrise. Anxious to be convinced, I directed a trustworthy person to give me a call at that rumored time of day, and, "to make assurance doubly sure," as Shakspeare says, I fixed my alarm watch so that its tintinabulation should break the dead ear of morn at the precise time aforesaid, 6 A. M. Well, between them both, I was actually awakened—rose—and drew on my habiliments.

One daring deed accomplished leads to the attempt of others. I sallied forth to enjoy an ante breakfast walk in mid winter. It was a piece of temerity I know, but a man who can turn out at 6 A. M. can do any thing "strange and unnatural." Chance led me in my peregrinations within hearing of the depot bell of the Worcester railroad, and all at once it happened to pop into my head that your old friends, the Messrs. Winships, or, as we style them, the Captain and the Squire, enjoy all the inconveniences of a convenient distance from the metropolis, at Brighton, four miles out. With an aptness of memory which can only be conceived by one who wants a breakfast, it also occurred to me that I had a standing invitation from those gentlemen to visit them whenever it suited my leisure—and when so suitable a time as when I had redeemed three hours from sleep? Of the reception I met, and all that, I will not tantalize you by speaking. The nursery of young, useful and ornamental trees, looked more extensive in its winter desolation, than it looks beautiful in its summer foliage—just like any nursery except—and the exception is one half the reason of my writing—very tender affection for you, and self-laudation being the other half.

It was neither more nor less than a fruit tree in full bearing. In a green-house? you say. No. Not only had it been exposed to all the rigors of the winter, but it takes a smart chance of frost to bring its fruit to maturity. I inquired its name, and the Captain called it the Shepherdia eleagnoides. Whereat I requested him to pencil that name down, for the benefit of my botanical friends, and to give me another which I might use in the vernacular. He then offered me the Silver leaf Shepherdia, but that had still a smack of the pagan in it, and to accommodate my predilection for a Christian name he then told me I might call it the Buffalo Berry Tree. It will live in almost any climate—the harder the better—being a native of the Rocky mountains. The tree forms an elegant continual ornament for any gentleman's grounds, being in summer clothed with a rich egg-leaved foliage, bright green on the upper side, and delicate silver beneath; and in winter red, with thick clusters of its fruit. This latter is in size and shape like a currant, and in taste has a pleasant tartness, which I can liken exactly to nothing else I have tasted. Preserved, it makes an elegant jam. They have quite a nursery of fruit-bearing trees, ready for transplanting in the spring. The parent tree, now about twenty feet in height, was raised from seed received per mail from Wm. F. Redding, of Baltimore, 15 years ago. Uncle Sam's mail carriers had no fancy, when transporting the letter, that they were carrying an elegant feature of the New-England landscape—or what will be an elegant feature when people become acquainted with the tree. If they are not persuaded to transplant it to their grounds for its own sake, they will certainly give it the preference over others, when the matter of planting trees is decided on without reference to this particular one.

Its name indicates the fondness of wild animals for it; and hunters frequently make it an essential part of their food, even before their stores are exhausted, or much diminished. The Captain has quite a bevy of pensioners in the robins, who, by wintering with him, seem tacitly to accuse the southern climes of having nothing better to offer them than the Buffalo Berry—sometimes called the American Olive, but why, I cannot exactly imagine.

After sufficiently admiring the tree, and the greenhouse of the Messrs. Winships, one of those gentlemen politely offered me a seat in his chaise, and took Watertown in the way to Boston, to call at Mr. Cushing's place, and at Mount Auburn. The first feature that strikes the visitor at the conservatory of Mr. Cushing, is its peculiarly happy location. A grove of pine trees (natural growth) protects it from the easterly winds, and the approach to the mansion is an avenue shaded by forest trees. A fountain is in the centre of the area—sealed, of course, in the winter season, and extensive ranges of trellis work for grapes and other vines, with a floor of strawberries, &c. must make the space before the green houses one of the most delightful spots conceivable in its season. Should I protract my visit to this *Northern* world into the summer, I shall take opportunity to enjoy a visit to it—as I certainly shall to the Messrs. Winships. Entering the green house, the first object which strikes the visitor is the disposition of a number of beautiful orange trees, so arranged that their yellow fruit is an admirable contrast with the deep green foliage of other plants, which conceals all their trunks. Time and space would fail me to enumerate even the names of the rare and beautiful exotics from every quarter of the globe, which are here collected; much less is it possible to attempt a description of them. All commendation is due, however, to the pure taste which led the proprietor of this Eden thus to appropriate a portion of his abundant means—and all praise should be accorded to Mr. Haggerston, the inteligent gardener, for his share in the disposition and culture of plants requiring so dissimilar management as is supposed, by their various origins. It does appear to me that no person who lives thus "among the roses," can be but improved and rendered better, kinder, and more susceptible to the best impulses of our nature, by converse and communion at all times with the most beautiful things in creation.

At Mount Auburn we did not alight. Had we done so my space would not suffice to enter into a description. The aspect of the spot as we passed it, suggested only the gloomier thoughts of which death is the prompter—but with that gloom came relief from the natural connection of the promise of the return of spring, the regeneration of the vernal features of the place, and the beautiful mystery of the resurrection from the dead, taught by our holy religion. Yours, ———

Boston, Jan. 1837.

Objections to forming Roads, after the manner of Turnpikes.

No. V.

We are not professors whose province it is, to teach the arts. It is but little that we claim to know of the art of road-making, and that little, whatever it may be, has been acquired chiefly by long experience, and attentive observation. We know enough, however, to be satisfied, that much of the labor applied to roads, under the direction of pathmasters, is rendered unavailing, and not unfrequently detrimental, by the injudicious and unskilful manner of its application. Pathmasters do not, in general, aim at improvements in the art of making and repairing roads—indeed, few of them seem to suppose that such improvements are practicable. Without seeking to become authors of useful innovations, they generally content themselves to pursue the beaten track of their predecessors, and thus help to perpetuate errors.

Among the many errors which prevail, in regard to the manner of making and repairing roads, there is one which we think requires special notice, because it prevails to a great extent, and is distinguished above all the others, for its mischievous effects. The error to which we here allude, is that of making an indiscreet and extravagant use of the plough and scraper. We think the practice which prevails so extensively of ploughing and throwing up, and thus giving to the parts of roads intended for use, an elevated and oval form, is, in most cases, a misapplication of labor, and frequently very detrimental to the roads. This, from its similarity to the manner of making turnpike roads, is usually called *turnpiking*. Contrary to all the lights of experience, as well as the dictates of tutored reason, the sentiment has prevailed almost universally, and still prevails, that roads formed in this manner, will turn off water the more readily, and thus be better secured against damages by excessive humidity. Although by countless experiments, the fact has been shown to be otherwise, yet the sentiment is pertinaciously persisted in, and the practice continued, to the great damage of roads. It does not appear that, in ordinary cases, throwing up roads so as to give them an elevated and oval form, contributes any thing to their advantage, but frequently much to their disadvantage. Strange as it may seem to those who have not reflected on the subject, roads constructed in this form, receive greater injury from the presence of water, than almost any others. It is true, a portion of the water that falls upon them, readily passes off; but enough remains to fill the ruts, and to fill also all other indentations and depressions whether produced by the tread of horses, or other agencies. Into these receptacles the water gathers, and there it remains, until it sinks into the ground, or goes off by evaporation.

It should be remarked here that, on roads constructed in the form of which we are speaking, ruts form with peculiar facility, and when formed, they deepen apace. This is attributable, as well to the broken and loose texture of the ground, as to the confinement of carriages to the same, or nearly the same tracks. The first carriage that passes on a newly constructed road of this order, makes indentations, and thus forms ruts, which are deepened by every carriage subsequently passing. These ruts, retaining the water that gathers into them, become mud holes, or rather, one continuous mud-hole, extending often several rods in length. It should be considered, that no advantage is gained by turning off a portion of the water, while there remains upon the road as great a quantity, as can find employment in the agency of mischief. The ruts, and other indentations which are always present, on roads having an elevated and convex form, are, when the weather is wet, all the while saturated with water. The water thus collected and confined, penetrates deeply into the ground, destroying its texture, and rendering it as soft and spongy, as it possibly can be. Here then is employed a quantity of water which is alone sufficient to achieve, and which although unaided by more, certainly will achieve the destruction of the road. Such, we are satisfied, are the origin and cause of the most formidable mud-holes that are found upon roads.

It should be considered too, that roads elevated in the middle, and having a convex form, soon lose their convexity. The central part, which was at first the most elevated, is quickly flattened down. By the treading of animals, and the agency of wheels, the ground is shoved off right and left, and thus the central part frequently becomes concave rather than convex. Such cases are by no means unfrequent. They generally happen, especially, when the elevation is considerable, and the materials composing it are of a loose and spungy texture. Surely, in such cases, no advantage is gained, by having the road elevated. On the top of it, there is a reservoir of water, and that alone is enough to render the road superlatively bad. D. S.

Marcellus, Onondaga County, February, 1837.

Duties of the Readers of the Farmer.

We have not forgotten our duties to the Genesee Farmer. They are many and various. First, to extend its circulation; second, to increase its usefulness by communicating every thing we possess in the shape of information; and third, to use every practicable means of obtaining information that may be worthy of perusal. It is indeed lamentable to witness the heedless apathy that prevails among those whose highest and dearest interests are the subject of investigation in this journal. It seems as though men aimed at no higher object than to perpetuate their individual existence by a scanty subsistence; and when we feel ourselves classed among the number of those who are thus negligent of their own and their country's good, we often enquire into the cause without being

able to render an adequate reason. The most flattering to the editor generally presents itself, and we lay the unction to our consciences that we can write nothing which has not already been written, and which has not already appeared in a more attractive dress than we could furnish. But there are more ways men may be benefited than by seeking new food, or serving up the old with a change of condiments. We require to be stimulated to the application of the knowledge we possess, as well as to acquire more; and when we see the knowledge with which we are familiar, used by others with greater success than we obtain ourselves, the circumstance is eminently calculated to excite useful ambition and salutary reflection.

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Operation of Gypsum.

We have seen the *modus operandi* of gypsum illustrated during the past season, by a careless act, which we shall not hesitate to expose for the benefits that others may derive from it. We purchased a few tons, and having no more convenient place of deposit, ordered it to be emptied on the barn floor. Two sacks, which had originally contained Liverpool salt, instead of being emptied were left standing against the weather boarding, which being open and loose, left the bags exposed to the beating in of the rain. In less than a week the bags as well as the loose hay and straw round the edge of the floor where the gypsum was deposited, were completely rotted; the bags were so worthless as to fall to pieces upon being touched, and the whole was thrown upon the dung heap together. Upon carting away the dung, that where the gypsum had been mixed was much more putrescent than the residue of the heap. Whether others have ever experienced similar effects from like causes, we are not aware, but from the facts we draw the following conclusions:

That gypsum operates in the same manner as lime, by reducing and breaking down or decomposing all vegetable substances and holding them in a state of solution:

That it absorbs moisture from atmospheric air, decomposes it, and parts with it to the absorbent vessels of plants:

That its operation upon the atmosphere furnishes a solution of the query why it assists the growth of broad leaved vegetables, such as corn, clover, turneps, buckwheat, and potatoes, more than the small grains, and why it is so much more nourishing to succulent vegetables than to drier herbage.

Let us suppose for a moment that by any process in the great laboratory of nature, this exceedingly fertilizing mineral should be decomposed. We then obtain sulphuric acid, lime and water. With the influence of water upon vegetation we are all acquainted; with that of lime many satisfactory experiments have been made; but with the operation of sulphuric acid our aquaintance is exceedingly limited. By the assistance of heat we know it decomposes the oxalic acid, and substitutes clover for sorrel wherever it is applied. Its decomposition by means of the fixed alkalies, and the alkaline carbonates, furnishes a strong presumption that a mixture of gypsum and ashes is more fertilizing than either of them used separately; and this position is strengthened by the affinity sulphuric acid and sulphur have for volatile alkaline substances, which they retain in or near the surface of the earth, and constitute the most fertilizing material with which we are acquainted.

We witnessed within a few weeks past, an experiment conducted in one of the southern counties of Pennsylvania, by a practical and profound agricultural chemist, which may serve to elicit enquiry. It was exhibited to a large audience, among whom we were gratified to see farmers and many of their families.

A quantity of hydrogen gas and sulphuric acid were made to pass together through a red hot tube. The acid was decomposed almost instantly, a large quantity of water was formed, and sulphur deposited. Here then by the aid of hydrogen gas, which abounds in the atmosphere, we obtain two substances, water and sulphur, both advantageous to the growth of plants; and when we reflect upon the affinity of the acid for water, of which it will absorb more than six times its own weight, and recollect the incredible weight of gypsum itself, we can hardly form among the various combinations, any idea of the amount of moisture thus furnished to vegetables. It is true the gas and the acid were both subjected to a higher degree of temperature to effect their decomposition than they would be in the ordinary process of vegetation, but doubtless nature has more ways than one of decomposing the acid when it becomes separated from the lime; and we were much pleased at the suggestion made by one of the audience, that the passage of the electric fluid through the two substances might produce the same or perhaps more useful effects.

If time and circumstances permit, we should be glad to pursue these experiments, and give a more elaborate detail of facts and consequences; but when we commenced this article our object was to call the attention of farmers to the probably diminished quantity of their manure, arising from the failure of their corn and other grain crops, combined with the tempting offers of the butcher and the drover. We have felt deeply interested in supplying the deficiency of excrementitious substances, and know of no better plan than a free use of this mineral. We succeeded last season in obtaining 1300 bushels of ruta baga from 200 perches of land, by freely applying a mixture of ashes and gypsum. The lot had been previously prepared for, and planted with corn, but finding the crop likely to fail from the peculiarities of the season, we substituted the Swedes on part of the lot, and so far as that part of it was considered, had good reason to be gratified at the loss of our corn.

From an adjoining acre, by replanting it, we obtained 25 bushels of sound corn, worth at the present prices,.....	$25 00
About 12 bushels of soft corn, supposed worth	6 00
And corn fodder estimated at.....	10 00
	$41 00
The ruta baga, at twenty cents per bushel, would be.....	$260 00

At the present price of produce they may safely be estimated at 30 cents. And if the opinion of many respectable feeders is adopted, that two bushels of turneps is equal to one of corn, the result might be considered extravagant if not altogether improbable. The facts however need no comment. HOLKHAM.

Agricultural Prosperity.

Never, since the first settlement of the country, were farmers in circumstances so easy and prosperous as the present time; and if they are not paying off their debts, improving their lands and buildings and making provision for the education and settlement of their children, it is because they are indolent, or inattentive to their affairs. It is true some parts of the country, have been less abundant than in former years; but others have been more so, and it is believed, taking the whole into consideration, the fruits of the earth have not fallen much short of its average annual increase;—and as for prices of all kinds of agricultural production, they are unprecedented in our history. Without detailing present prices, it may safely be stated, that farmer's produce, especially articles indispensable to the upholding of life, has advanced at least fifty per cent. within the last eighteen months; and it is fair to infer that their lands have advanced in the same ratio—for real estate, like stocks, rises and falls in market with the amount of the income it yields, or with good management may be made to yield, its cultivator. If this be so, it follows that every farmer is actually worth at least fifty per cent. more than he was a year and a half ago, and more than he may suppose himself to be worth at the present time.

Though the causes which have produced this astonishing advance in the prices of farmer's produce, while those of the manufacturer have remained nearly stationary, may be concealed from his view; yet he may rest assured they are of such a nature as to warrant him in increased exertions in the cultivation of his farm, and the product of such fruits of the earth as are necessary to sustain life. While the present disposition to exchange the labors of the field for those of the workshop, the factory and the learned professions continues—while the present mania for the construction of canals, rail-roads and other public works rages—and while the present tide of foreign population flows in upon us, the present disproportion between production and consumption will exist and prevent a material reduction in present prices. Though agriculture is unquestionably the most profitable business which is pursued under existing circumstances, yet many farmers are complaining about hard times. They claim that the present high prices afford them no facilities for the acquisition of wealth, and assign as a principal reason the high price of labor—but they forget that their labor is an important part of their capital, and that as it advances in value their capital is increased in amount. This remark, it is true, is more peculiary applicable to practical farmers—men who labor with their own hands, and such are ordinarily the men who accumulate wealth by agriculture.

As highly as we estimate the profession of an agriculturist, and as profitable as we believe the business to be at the present time, we would advise no man to engage in it whose hands are too delicate to handle a hoe without gloves. To insure the farmer success he must labor, more or less, with his own hands, and be capable of judging whether his work is well or ill done. He must also know whether his hired help perform that amount of labor which they are in duty bound to render him, and whether the results of it will leave him a profit after their wages are deducted. Gentlemen who have acquired fortunes by commercial and professional business, and who may be disposed to retire to rural life, will find much amusement in agriculture: but they must not be disappointed if they find but little profit. The profits of a farm are in proportion to the amount of labor bestowed upon it: and the farmer who performs it principally with his own hands and those of his family, generally grows richer and richer, while the one whose hands are too tender to endure the rays of the sun, and whose children are to good to work, almost invariably grows poorer and poorer. —*Silk Culturist.*

Penobscot (Me.) Agricultural Society.

STATEMENT ON WHEAT CULTURE.

DEAR SIR.—In entering my claims for a Premium on wheat, I would submit the following statement in relation to its culture.

The land selected was a very level piece, descending a very little to the north and west. It had, previous to the fall of 1834, been in mowing for about six years, without any extra dressing. This piece was broken up with the plough in September, 1834, and the furrows harrowed down. In this situation it remained until about the tenth day of May, 1835, when I carted about twenty cords of manure on to the whole piece, containing two acres and one hundred and forty two rods and four fifths of a rod. About one half of the manure, being that used where corn was to be planted, was pure stable manure, and the remainder was taken from the chip yard, and the general scrapings about the outbuilding and barn-yard. This was spread over the whole piece, which was then cross-ploughed and planted with corn, beans and potatoes. In the fal of 1835, about one half of this piece, being that planted with corn, was ploughed, and the whole remained until the last spring. About the 10th of last May, that part planted with potatoes and left without ploughing was ploughed up, and the whole piece harrowed, cross-ways of the furrows—when the wheat was sown, and the whole again harrowed. After which I sowed my grass seed, and went over the whole with a bush harrow.

In preparing my seed wheat, I was careful to wash it, until no impurity was visible in the water. It was then drained and a quantity of ashes put to it sufficient to absorb all the water and allow the kernels to separate, easily.

The soil on about half of the piece, was of a round gravelly soil, and the remainder of a sharp slaty soil.

The wheat was harvested about the first of Sept., and yielded eighty-eight bushels and three pecks, it being the kind usually known as the Tea wheat. It was all threshed in one day, by Mr. Parker Wilson's thresher, and fifty bushels of the same was cleaned the same day by a hand winnower with the labor of four men. Yours, REUBEN BALL.

Corinth, Nov. 3, 1836.

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Statement on Culture of Oats.

GENTLEMEN:—The land upon which I raised my crop of oats, presented to your Society for premium

had been cultivated two years before the present. The last year it was sowed with potatoes and produced abundantly. The present year the land was ploughed twice and a small lot of manure spread on. I then sowed on four bushels of oats to the acre, on the thirtieth day of May. The oats grew finely, but not so large as they probably would, had it been sufficiently wet. When I harvested my crop, and had the oats threshed out, I obtained *seventy-four bushels to the acre.* Yours, respectfully,

HEMAN S. JACKSON.

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Statement on Culture of Corn and Beans.

GENTLEMEN:—The following statement is in relation to the cultivation of half an acre of land, the present year; the crop of a part of which I offer the Penobscot Agricultural Society for the premium. The half cultivated with corn was in grass prior to 1834, in the spring of which year the land was ploughed and sowed to oats. In 1835 it was ploughed as usual, manured with coarse manure, and planted with corn. Crop a good one. Last spring the land was sowed and harrowed; drills three feet apart were made with the plough, into which was put a liberal, but not very large, quantity of old barn yard manure. Seed corn was then dropped ten inches apart. At the first hoeing I applied three bushels of ashes to the corn, leaving nine rows across the piece to which was applied one peck of Gypsum. Both ashes and plaster had an equal influence on the crop. The land was hoed sufficiently often to keep down weeds. I kept no particular account of labor; but think it no more than is usually bestowed on hoed crops. In September, I harvested from one half the above named piece of land. forty-five bushel baskets well filled of sound, and three do. of soft corn, which I estimate at more than sixty bushels to the acre. The corn was eight rowed. I had the seed from an Island on the coast of Maine.

The other half of this land was in grass prior to 1835, when it was ploughed and sowed to wheat. Crop a fair one. In the autumn of that year it was again ploughed. In the spring of 1836 a liberal supply of coarse manure was spread on the ground and ploughed in, drills were made as for corn, and on the 22d of May, the pea bean, so called, was put in the drill, about four inches apart. The subsequent cultivation was the same as that of the corn. Some of the first days of September, the field was harvested, and produced ten bushels and twelve quarts, equal to 41 and a half bushels to the acre. The land on which both crops grew, is what is called rocky upland. Respectfully, yours,

NATHANIEL BURRILL.

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Statement on Culture of Ruta Baga.

GENTLEMEN:—The crop of Ruta Baga which I have entered for premium on one acre, was raised in this town on a piece of green-sward intervale, and the seed were sown about the 10th day of June last.

After the land was ploughed, I carted on twelve cords of green barn manure which was spread upon the surface and the whole again ploughed and then harrowed—back-furrowed three feet distant and sowed in drills on the furrows, about one foot apart. After the second leaf had set, the weeding process commenced, leaving two or three plants in a hill. The land being remarkably clear, it was not necessary to weed them a second time. The crop was harvested and secured in my cellar, on the 21st day of October, and there was seven hundred and eighty-nine bushels, good measure. R. GORDON.

Dutton, Nov. 8, 1836.

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Statement on Culture of Oats and Peas.

GENTLEMEN:—In the fall of 1832, I cleared off the logs and bushes from one acre of land that had lain dormant for eight years. I then ploughed the piece and let it remain till the following spring, when I harrowed it and cross ploughed, and then planted with potatoes, which crop was repeated the following year, and after the crop was secured, the ground was ploughed and left until the next spring (1835) when I again ploughed it and sowed one and a half bushels of wheat, which produced twenty-six bushels. The stubble was ploughed in, in the fall, and last spring the same was again ploughed and harrowed. About the twentieth day of last May, I sowed one bushel of peas with two bushels of oats, from which I obtained forty-two bushels of peas and oats. During the above described process, no manure was applied to the land. THOS. H. NORCROSS.

Charleston, Nov. 7, 1836.

Culture of Root Crops.

There is nothing that will ever contribute to the prosperity and advancement of the agricultural interest of Susquehanna County in so great a degree as the culture of Root Crops. There is no country on the face of the Globe better adapted to their production than this county. Potatoes, Turnips, Ruta Baga and Beets, seem destined by nature to fill the country, and a comparison of such crops with the best wheat crops will show at a glance, the infinite and immeasurable advantages which the former furnishes.

A fair crop of wheat in the best wheat soils is 40 bushels. We will take it at the present price, $1,-75 per bushel, $70,00

The most ordinary crop of potatoes is 200 bushels to the acre; we have never raised less than 300 bushels except in one instance when it was a total failure. The ordinary price of potatoes is 25 cts. when wheat is at $1; making the price when wheat is at $1,75—44¾ cts. at 200 bushels the crop would be, 87,50

When the crop is 300 bushels, which is no higher estimate than 40 bushels of wheat, it would be, 131,25

But taking instead of the potatoes, a crop of turnips; we have the usual estimate of 800 bushels at 20 cents per bushel, and they amount to 160,00

Two bushels are always estimated by cattle feeders equal to 1 bushel of corn. They may therefore be safely calculated as worth 35 cts. making. 280,00

Difference in favor of potatoes, $ 51,25
Do. in favor of turnips, 280,00

Facts like these need no comments; they fully justify the remark of Lord Kames, a celebrated English agriculturist, that if any man was entitled to the epithet of Benfactor of his country, it was the humble individual-who first introduced the culture of turnips. There is no crop equal to them for ameliorating the soil and preparing it for grain. There is none that exhausts it less, and there can be nothing more useful as sheep or cattle food. And to these truths, that many instances can be furnished where the crop of potatoes has reached 600 & the crop of turnips 1200 bushels, & we see at once the magnitude of the loss that our best Farmers are constantly sustaining by their efforts to raise the small grains. Will they never learn wisdom from —*Susquehanna Register.* EXPERIENCE.

Chinese Method of Dwarfing Trees.

The Chinese are remarkable for their taste in wishing to have even the most stupendous objects in nature in miniature: mountains, rocks, lakes, rivers, aged trees, must all be represented and modelled upon a scale of a few inches. The former are formed of natural fragments, curiously and fantastically cemented tagether, leaving water-tight hollows and little channels, to represent lakes and rivers. The dwarfed trees are, however, very curiously trained, requiring considerable skill, and a considerable period of time, to get the trees into the desired form.

The trees which they commonly choose to train as dwarfs are, their native juniper (*J.* chinensis), the dwarf elm (*U*lmus pumila), and the Indian fig (*F.* indica). The means employed in dwarfing these plants are,—keeping them always in the same pot—allowing but little earth for them to grow in, the pot being half filled with rugged stones, which jut out of the surface; among these some of the roots are brought out, twisted together, and the points again buried in the soil; no more water is given than but barely keeps the plants alive. The bark of the stem and branches is torn and mangled in all manner of ways; sometimes a branch is slipped from the stem, but not entirely off, so as to hang downward, and kept in that position by wire. By wires, also, the tortuous direction of the shoots are given; and being repeatedly stopped, and the half of every leaf cut off, tends materially to check all vegetative inherent vigor, and in time produces a *vegetable cripple.* When the native vigor is thus subdued, the plant becomes subject to moss, lichens, and every wether-stain so desirable on such an object, to give the idea of hoar antiquity to a plant only of ten or a dozen years growth. Such dwarfed trees are considered valuable; and some of the merchants imagine that they cannot make a more acceptable present to a European friend, than one of those dwarfed trees!—(*Paxton's Hort. Reg.*)

Grafting.

The mode of grafting which I prefer, is technically called cleft grafting, and is that most commonly practised in nurseries and in top grafting also. As my practice has some peculiarities in its mode, I shall aim at a description of it. The stock may be cut off with an oblique cut; a vertical or perpendicular cleft is now to be made across the slope, and say and inch and a half deep, with a butcher knife, a new one is best that it may be sharp and thin, in order that the stock may be slit apart rather than cleft, which leaves it much smoother to receive the pen; which latter must now be cut in a perpendicular direction in the form of a wedge; the upper part of this wedge must be cut with a shoulder, but inasmuch as it should be made with a single cut downward, on each side, with a common penknife; the shoulder will necessarily be of a bevel form, and somewhat scolloping. The part to be inserted, however, should be two inclined planes, coming together to a point, and a little the thickest on the outside, and the slit may now be held open by pressing the thumb backward against the inside of the slope on the long side, and the pen may be pushed downward as far as the shoulder will permit, in such manner that the inner bark of the stock, and that of the scion may meet exactly together. If the stock does not hold the pen firmly, it may be tied with woolen yarn or bass shreads. The earth may now be drawn round the scion and pressed firmly about it. If the cement was applied according to Hopkins' recommendation, the success would brobably be more certain; and for top grafting, clay or cement of some kind is indispensable. McMahon says, "the best time for grafting is just when the buds have swollen and are ready to burst," and this accords with my experience. S. PHILLIPS, Jr.

Chinese Mulberry, Morus Multicaulis.

The immense quantities of this tree, now disseminated through every part of the Union, from the different nurseries, will undoubtedly serve to test thoroughly its good or bad qualities. Its hardihood will also be fairly proved by the present winter, which so far at least, may be considered a season of the ordinary severity. For ourselves we have no doubt that the MORUS multicaulis will become perfectly naturalized in every part of the Union south of 42° latitude, and that the facility of silk-rearing will be wonderfully increased by it. The leaves being of very large size, the trouble of gathering a given weight is greatly diminished, and there is every reason to believe that two crops of silk may be reared ubon them in a single season. The French silk growers now plant the Morus multicaulis entirely in rows or hedges, to be kept dwarf by cutting them down to within one, two or three feet of the ground annually. The advantages of this method are—perfect hardihood of the plants—facility in gathering—and enormous weight of foliage from a small surface. In addition to this, a crop of silk worms may be fed on the leaves from the cuttings of the Chinese mulberry of a single season's growth, instead, as in the case of the old Italian vanity, of waiting until the tree attained considerable size before plucking the foliage.—*Boston Magizine of Horticulture.*

Vanack Cabbage.

This fine cabbage, which is but little known in this country, is deserving of extensive cultivation. It is not only extremely early, but is a fine looking cabbage, and possesses the excellent qualities of tenderness and fine flavor. Seeds of this variety, sown on the 3d of June, came to full maturity early in August. We presented a fine head before the Massachusetts Horticultural Society last season, which wss produced in our garden, in the hope that many of our market gardeners would be induced, from some notice they might take of it, to try it for an early crop, in preference to the Early York or

Early Dutch; but from some cause it was only noticed as presented at a meeting of the Society, without scarcely any remarks in regard ro its qualities. We hope another season that it will be more extensively cultivated: it is considered as one of the best in England, and from what we know and have seen of it, we can highly recommended it for its excellency.—*American Gard. Mag.*

Singular Phenomenon.

About the latter part of December, a Mr. Cambridge, travelling near Devizes, in England, in a storm of rain and hail from the west, perceived a bright, white, globular light at the top of each of his horses ears, resembling weak gas lights. Soon afterwards, fifty or more of these lights appeared about the horses head and ears, and ten or twelve on the stick carried by the rider. They lasted till he proceeded about a quarter of a mile, and disappeared. Mr. Cambridge gave the following account:

"I rubbed my hands down the horse's neck but that had no effect in removing the lights; I also rubbed with my hand the stick twice, but still the lights were not removed; the horse became very timid, and shook his head, and stepped very much at the time, so that I had enough to do to keep him in the road: it was remarkably dark before the lights came on, but when they were on the horse and the stick, I could see the colour of each perfectly, but yet threw no light toward the hinder part of the horse, and my hat appeared to be also covered with the lights, but I did not observe any on my coat; the lights were about the size of the fourpennypieces. The same thing was seen by a man and woman, about a mile distant, in the same direction the storm was; it was also seen by Mr. Smallbone, on whose whip-handle only it appeared, and particularly on the knots, as it was with my stick; yet there appeared no flame, but a still bright light."

Fruit kept sound in Cotton.

We have been informed by a gentleman, who has had practical proof of its success, of a new mode of keeping fruits fresh for the table, as grapes, plums, &c, a long time after they have been gathered. It is simply to alternate them in layers of cotton batting, in clean stone jars, and to place them in a chamber secure from frost. The discovery was accidental. A servent maid in the family of William Marcy of Union village, Washington county, about to visit her friends, &c, cured a quantity of plums in this way to preserve them till her return. They were found to have kept in excellent condition long after the fruit had disappeared in the garden. From the hint thus afforded, Mr. Marcy, Mr. Holmes, and one or two neighbors laid down grapes in this manner last fall, and they enjoyed the luxury of fresh, fine flavored fruit through the winter until the early part of March.—[*N. E. Farmer.*

SHEEP.—Samuel Dawane of Woodstock, communicates to the Editor of the Courier the following information, which we copy for the benefit of those cencerned.

I have kept Sheep for fifty years, and never knew of the ailment, which for want of a known name, I called the *Stretches*, until the introduction of the Merino Sheep; since introducing them into my flock, I have had more or less sheep every winter troubled with that complaint. The sheep so attacked, stretch themselves to the utmost, lie down anrise up often, refuse all food, and generally die in from four to eight days. The complaint is most frequent in hard winters, when they are kept long from the ground, but never (to my knowledge) occurs in the season of grass—hence I was led to think it was caused by the bowels not being sufficiently open—if so the remedy was at hand. The last winter, being long and severe, I had a number attacked with the complaint. In every case I turned down them a table-spoonfool of Castor Oil, and in every instance they were well and eating their fodder in a few hours, and I lost not a single sheep. This winter I have had one attacked, and applied the remedy with the like effect. Should others have sheep so attacked, I advise, them to try the remedy, and I doubt not they will find the like benefit.

Agricultural State Convention.

This Convention assembled at the Assembly Chamber in Albany on the 2d instant.

On motion of the Hon. Mr. Dickinson, Judge PETTIT, of Onondaga, was appointed temporary Chairman; and Mr. DUANE of Schenectady, and Doctor SPOOR of Greene, Secretaries.

On motion of Judge Buel, the delegates in attendance handed in their names.

On motion of the Hon. Hiram Gray, of Chemung, a committee of eight was appointed to nominate Officers to the Convention.

On motion of Mr. Viele, of Rensselaer, a committee of eight was appointed to prepare Resolutions expressive of the sense of the Convention.

The committee appointed for that purpose reported the names of the following gentlemen as the officers of the Convention:—

President—ANTHONY VAN BERGEN, of Greene County.

Vice Presidents—JOHN TOWNSEND, of Albany, HENRY F. JONES, of Queens, GEORGE PETTIT, of Onondaga, and —— POND, of Oneida.

Secretaries— —— RICHARDS, of Washington, HENRY S. RANDALL, of Cortland, HIRAM M'NEIL, of Niagara, and —— SHELDEN, of Dutchess.

The report was accepted and the Officers took their seats.

The President announced the following committee on Resolutions:—

1st District.—HENRY PEET,
2d " MERIT H. CASH,
3d " J. J. VIELE,
4th " EZRA SMITH,
5th " E. P. BIGELOW,
6th " G. W. PATTERSON,
7th " J. C. ROBINSON,
8th " LEWIS F. ALLEN.

On motion of Judge Buel, Messrs. M'INTYRE, BEEKMAN and BALDWIN, were appointed a committee to examine and report upon the nature and value of the silk spinning machine which was exhibited to the Convention.

On motion of Doct. Beekman, a committee of five was appointed to prepare and report the business proper for the action of the convention.

And then the convention adjourned, to meet again this afternoon at 4 o'clock.

TO THE LADIES.—It is said if you fill flower-pots about half full of quick lime, and cover over this a good mould, the flowers may thus be obtained in a very short time, and at all seasons.—The earth should be kept sligtly moistened, and pressed down whenever it rises by the swelling of the lime.

Superior Garden and Agricultural Seeds.

THE subscriber has now on hand a full supply of Garden and Field Seeds, growth of 1836, among which are all the finest Cabbages, Cauliflowers, Brocolie, Radishes, Peas, &c. that are cultivated in England, France and Holland, together with every sort that can be raised to advantage in our own country, and which are grown expressly for my use, from stock furnished and raised by the most experienced gardeners in this country: in short every article emanating from my store, warranted genuine and fresh.

Also, Skinless Oats, Potato Oats, 44lb. weight to the bushel, Perennial Rye Grass, White Clover, Lucerne or French Clover, Orchard Grass, Herds Grass, White Mulberry and Yellow Locust Seeds, Spring Tares or Vetches, genuine Mangel Wurtzel, Ruta Baga and Field Turnep Seeds, well worth the attention of Farmers.

Wholesale dealers supplied on accommodating terms. Price lists, by the pound and bushel, furnished on application, as also catalogues of my whole collection, gratis.

Flower roots, hulb glasses, green house plants, the best books on gardening, &c. at various prices, bird seed of every sort, pearl barley, oatmeal, embden grots for gruel, split peas, white and brown mnstard seed, garden flower pots and garden tools, russian bass mats.

The Flower Seed department embraces the choicest variety to be found in this country, in which are included choice double dahlia seed, carnation and choice pinks, German and China asters, splendid double balsams, with an addition of several new varieties, accompanied with a printed direction for culture and management.

Orders will be punctually attended to, and carefully packed and forwarded as directed. But as the collection of distant debts is often troublesome, and somstimes impracticable, it is desired that satisfactory references be made to persons in Albany, when the order is not accompanied with the money.

SEED CORN—The subscriber has a quantity of the celebrated 12 rowed Dutton Corn, raised by J. Buel. The advantages of raising this corn are its prolific qualities, being easily made to yield from 70 to 80 bushels to the acre, and its early maturity, ripening in about 100 days from time of planting.

W. THORBURN,
feb 18 No. 317 N. Market-st. Albany.

Rochester Seed Store—1837.—No 5 Arcade Hall.

REYNOLDS & BATEHAM having made their arrangements for the season, would inform the public that they are now prepared to execute orders for all kinds of SEEDS, at short notice.

They have just received from one of the most respectable dealers in London, a large supply of English seeds, which were shipped to their order last fall, of the growth of 1836—which, together with their assortment of American growth, renders their present stock the most extensive and complete everloffered in this country. Their experience in the business in this place, and their extensive acquaintance with seed growers and dealers, enables them to obtain the greatest variety of seeds, from the best sources, and on the most favorable terms; as well as to select such as are best adapted to the soil and climate of this country.

Wishing to sustain the reputation of the ROCHESTER SEED STORE, the proprietors are determined to sell only such articles, and at such prices, as will give general satisfaction, and ensure a continuation of the liberal patronage they have hitherto received.

Merchants and others supplied with seeds at wholesale, by weight, or in boxes for retailing, at a liberal discount. Catalogues may be had at the store gratis, or sent by mail if desired.

REYNOLDS & BATEHAM.
feb 18

Chinese Mulberries, &c.

THE SUBSCRIBERS HAVE STILL ON HAND THE FOLLOWING:

30,000 Morus multicaulis, the wood of which is fully matured, there having been no premature frosts on Long Island this season. Also, 50,000 cuttings can be supplied.

20,000 Ingrafted Trees, of the new Chinese Mulberry, with large thick leaves, remarkable for the quantity of nutritious matter; this species being sufficiently hardy for the most northern latitudes, and possessing all the advantages of the Morus multicaulis. These are from 3 to 6 feet in height.

30,000 Hybrid Morus multicaulis, with large leaves and close joints, 5 to 6 feet in height.

35,000 Florence Mulberry, with entire leaves, in which point they differ from the common white Mulberry. These are imported direct from the best silk district of France, are from 1 1-2 to 2 1-2 feet in height, and will be sold at very low rates.

60lbs. White Italian Mulberry Seed.

Priced catalogues of Trees, Green House Plants, Dahlias, Garden Seeds, &c. will be sent to every applicant.

WM. PRINCE & SONS.
feb 18 3t Linnæan Garden and Nurseries, Flushing.

Brighton Nurseries.

FOR SALE, 20,000 Morus multicaulis, or Chinese Mulberry Plants, warranted the true and genuine kind. Orders addressed (by mail) to Messrs. WINSHIP, Brighton, Mass. for Mulberry, Fruit ond Ornamental Trees, Shrubs, Creepers, Herbaceous Perennials, &c. &c. that are cultivated in any nurseries in the United States, with a first rate collection of Green House Plants, will receive prompt attention, and if required, forwarded to any part of the Union.

Brighton, Jan. 18, 1837. 4t

Morus Multicaulis.

JOSEPH DAVENPORT offers for sale 50,000 plants of the true Chinese Mulberry, or Morus multicaulis. Trees will be carefully packed and forwarded as early as desired. Orders must be sent to Colerain, Mass. till the 15th of March; after which time to Hartford, Ct. All inquiries will be attended to at his plantation, 5 miles south-west of the city. Early orders only will be supplied, as arrangements will be made to use all not called for soon.

Colerain, Jan. 23, 1837.

To be Sold,

A VERY excellent Farm, beautifully situated, adjoining the village of Ancaster, near the head of lake Ontario, Upper Canada, about 7 miles from Hamilton and Burlington Bay; consisting of 200 acres (40 chains wide by 50 chains deep.) About 120 are in cultivation. There is a comfortable house, a well, &c. frame barn, a stable, wagon house separate from the barn, a good old orchard in full bearing, and the farm is well watered, having the Ancaster mill stream passing thro' it, and affords a sufficient fall for a flour mill. As two of the surveyed lines of the great western rail-road pass through the farm, the probability is that many village lots may be sold on the line adopted. Apply to the proprietor on the premises, or to the subscriber in Rochester.

jan 14 6t LUTHER TUCKER.

AGRICULTURAL PAPERS.

THE publisher of the GENESEE FARMER, grateful for the patronage hitherto extended to his Agricultural papers, would give notice that a new volume (the 7th) of

The GENESEE FARMER, will commence on the first of January, 1837. It will be enlarged and otherwise improved, and no exertions spared to sustain the high rank it has attained. It is published every Saturday in quarto form, making an annual volume of 416 pages, at $2 a year, *payable in advance.*

The 2d volume of the MONTHLY GENESEE FARMER also commences on the first of January. It is published on the first of each month, 16 pages large octavo, at 50 cents a year—Seven copies for $3—Twelve for $5, always in advance. All letters to come free of postage.

☞ Postmasters, and others in all sections of the country, are respectfully invited to act as agents to procure subscribers for these papers.

☞ Editors with whom we exchange, are reunested to copy the above.

Farm Accounts.

Few points are more essential to success in any business than well kept accounts; and these are essential in farming as in other operations. They are necessary in order to ascertain the relative profits of the several crops we cultivate,and the adaptation of our farms to particular branches of husbandry. Without these, although the amount of profit or loss may be *guessed* at the end of the year, by the balance in hand, yet no comparative judgment can be formed of the value of different modes of culture, or of different kinds of stock, and though we sometimes hit right, we often hit wrong. We intend to publish ere long, a somewhat detailed account of the systems pursued by Gen. Beatson and Mr. Gregg, upon two farms of stiff clay, in England. By keeping accurate accounts, and varying their systems as economy and good judgment dictated, Mr. Gregg in a few years, enhanced the profits of a 240 acre farm more than 600*l*, or $2500 per annum. When Gen. B. took the management of his farm, the expense per acre of cultivating grain, under the old system of summer fallowing, including manure. rent and taxes, was 16*l*. 4s. per annum. In a few years he reduced this expense, by economical changes in his system of culture, without dimunition of crop, to about 5*l* per acre, or a third of the former expense.

The son of a farmer, arrived at years of discretion, might, with a little instruction, be enabled to keep a journal, which would tend very much to benefit him as well as to improve the profits of the farm. A preliminary step is to make a schedule of the stock and implements upon the farm, and to designate the different enclosures, as A. B. C. &c., with their contents in acres. Let him note down daily, the expenditures in labor, money, &c., for each field, the increase or diminution of stock, the products of each field, and its value for market or home consumption. This journal mav be posted into a ledger, where each field may be charged with the expenditures made upon it, and credited the value of the products. Deduct the lesser from the greater sum, and the balance is the profit or loss. Continue the account with this field through a course of crops, and from the general result, you will be able to judge of the crops and courses best adapted to the soil and the market, with a degree of certainty, and of the stock most profitable to be kept upon the farm.—*Cult.*

Experiments.

James M. Garnet, Esq., president of the agricultural society of Fredericksburgh, Va., gave, in a late address to that society, the results of some of his experiments in farming, a part of which we here insert, as matters of general interest.

1. He ploughed a part of nis corn ground in the fall, and another part just before planting, (the character and condition of the soil not stated) the corn upon both parts was planted and treated alike—but no difference was perceived in the product.

2. He dressed one part of a field of corn with the cultivator, and another part with a plough, and finished both with a hand hoe. He perceived no difference in the crop, though some said the corn made with the cultivator was the best. The saving of labor, however, by the use of the cultivator, he thinks, was two to five and a half or six.

3. His skinless oats produced little more than the seed.

4. An experiment in drilling wheat proved nearly a total failure; he hardly got two for one.

Mr. Garnet thus notices a class of farmers, not confined to Virginia, whom he denominates "*Procrastinators.*"

"A family, by the way, (says he) which, I fear, has more members in our dear state, than in any other that can be named. I speak *understandingly* (as congressmen say) on this subject, being at least cousin-german to some who rank very high among the brotherhood; although I must confess I do not pride myself much on the relationship. Among planters and farmers this family does quite as much mischief as the Hessian fly, the wheat-worm, the chink-bug, and all other flies, worms and bugs put together, that war upon their crops; and the man who could devise an effectual cure for their besetting sin, would justly merit the highest civic honors which could be conferred on him. Cure this, and we should no longer 'postpone to a more convenient season,' (as unbelievers do the consideration of religion) matters that imperatively require our immediate attention. We should never lose, as now frequently happens, a subordinate and subsidiary, but still important crop, by delaying to secure it at a critical time, merely because (as we say) *it would be working out of turn.* We should do every thing at the right season, but the particular order in which they were done, should always be varied according to the changes of the weather, and the condition of our arable lands. Thus to act, at all times, is the great art to secure success in all the branches of husbandry; and none who practice it constantly, will ever be under any necessity to abandon their native homes, their friends and their kindred, for strange lands, in pursuit of riches."—*Cultivator.*

Propagating the Peach.

1st. We gather the stones in the fall which we bury about an inch under ground, (high and early ground is preferred as the pits will sprout early in the spring,) spreading them singly but as closely as you can in order that the frost may have its full effect upon them. The best time for putting them in the ground is the last of October,but any time in October or November will do.

2d. *Preparing the Ground for the Young Trees.*—Select a rich and middling dry piece of ground, which if very rich, will do without manuring, but if not, manuring is insdispensable. Short and old manure is the best, and if some rich dirt be mixed therewith, I think all the better. The manure should be spread along the furrows, which should be made with a plow four feet apart. If any other manure be added after, I would recommend lime or ashes. The ground should be ploughed as well as harrowed well in the first place.

3d. *Transplanting.*—This should be done as soon as the pits begin to sprout in the spring by dropping them in the rows already prepared for them about 8 or 9 inches apart and coverd about an inch or more deep. Some nurserymen let the young sprouts grow 6 or 8 inches high before they transplant them but the former way I think the best. The young trees should be planted and hoed as often as necessary in order to keep them free from weeds and grass, say three or four times each, the last just before budding, and not afterwards that season.

4th. *Budding.*—Select from the healthiest trees the scions of the kinds you wish to propagate, cut off the leaves and keep them in water, at least the butt ends, (those buds which have three leaves on are the best.) They may be kept in this manner three or four days. Then take the scion in your left hand,holding the butt end downwards, enter your knife about half an inch below the bud and cut upwards about a quarter of an inch above the bud, taking the wood with it, and then cut across the twig deep enough for the bud to come off; then with the point of your knife take out the wood from the bud; then make a transverse cut in the stock to be budded, about three or four inches above the ground, (first trimming off the leaves and limbs about six inches above the ground;) from the middle of this cut make a slit about half an inch downwards, then with the point of your knife open the bark on each side of the slit, by the tranverse cut; enter the lower end of the bud therein, bearing it down with your thumb and finger till the top side of the bud comes just below the first transverse cut, then with bark or yarn wind below and above the bud in order to keep close to the wood. In twelve or fourteen days the bandage may be removed. The time of budding may be from the 20th of August to the 20th September, perhaps later sometimes. In the following spring when the buds grow three or four inches long, the old stalk should be cut off about an inch above the bud. In the following fall or spring you may set out your orchard, putting the trees about twenty feet apart. The ground should be rich and dry, not springy. Manuring is indispensable unless the ground be very rich. Corn or potatoes may be planted among the trees, with benefit to them for three or four years.—*Hort. Register.*

To cure chopped hands, in winter, rub a little cream or vinegar upon them, after using soap. The chopping proceeds from the caustic effects of the alkali in the soap, and these neutralize it. The natural sweat performs this office in summer.—*Cult.*

A Profitable Cow.

Mr. Editor: Will you please to insert in your paper the following interesting fact of a cow, raised and owned by Mr. Samuel Bradstreet of this town, which he killed this winter, at the age of 21 years. This cow has brought him 18 calves, which have been worth, when 5 weeks old, $5 each, $90 00

She has furnished him, at a moderate calculation, 6 quarts of milk per day, for 9 months in each of the last 18 years, which has been worth 5 cents per quart, making the sum of - - - - 1474 20

Now, Mr. Bradstreet goes into this nice calculation, and says, when I killed "Old Star," this winter, she was worth at least, for she was very fat, $25, - - - 25 00

$1589 20

Then he sets to "Old Star's" Dr. as follows: Had I killed her when a calf, she would have been worth $5 00

Cost for keeping till she was 3 years old, - - - - 15 00

Cost for keeping the last 18 years, at $20 per year, - - 360 00

380 00

Balance in favor of "Old Star," $1209 20

Now, Mr. Editor, perhaps some may doubt the credibility of the above statement, but I have not the least doubt but that Mr. Bradstreet has been perfectly honest in the account which he has kept between himself and "Old Star." If he has deviated in any particular, it is in the charges he has made for her keeping, as all who know the worth of keeping a cow, will agree with me in saying $20 is more than an average worth the last 18 years. I am fully persuaded, that, in this county, not an equal is to be found for Mr. Bradstreet's old Star. —*Salem Gazette.*

Hens.

Why cannot *Hens* be made as profitable in the winter as the summer? It is a well known fact that from December till March, they are a bill of expense, without any profit. I wish to give your readers my opinion as to the *cause* of this refusal on the part of hens to contribute to their own support, in hopes that some one may be benefitted, which is certainly all I ask, or expect for my labor, in this case.

Hens, in order to supply eggs, require as a condition that they be supplied with a portion of animal food as well as vegetable. This supply they get in the form of worms and insects, when free to go at large, unless their number is so large as to consume, beyond the supply within roving distance, which is the case where large flocks are kept, and it will be found that the number of eggs in proportion will be diminished, as the number of fowls are increased, unless a supply of animal food is furnished.—Here is a secret worth improving, and if some of your readers who live near a slaughter-house will collect the offal meat and feed hens with it they will find it a good business, so long as eggs bring the prices now demanded for them. When fowls are kept yarded, they require lime or burnt bones gravel, meat, corn or grain, and pure water. Supply them with these—give good shelter, and a warm room in winter, and you may safely calculate on a clear profit of one dollar on each hen, every year.—[*Mechanic & Farmer.*

Division of Perennials.

Aster alpinus, ramosus, acris, hysopifolius, amellus, linarfolius, and punctatus, are favorites in almost every garden; whilst the tall robust species are nearly discarded, or only used for filling up vacant places in shrubberies where little care is bestowed upon them. There are, however, few plants that will more amply repay for a little labor in cultivation, than many belonging to this genus. Every season early in March, take up all the free growing plants, replant only three suckers of the spreading sort, and only a small piece from the outside of the more compact growing kinds. As they advance in growth keep them carefuly tied to stakes and in autumn they will produce finer flowers, and in more abundance than if the whole patch had been left to send up a a great number of flower stems, to the detriment of each other.—*Flor Cab.*